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Context Factors for Pro-social Practices in Health Care

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Abstract. In order to reduce the shortage of healthcare workers, researchers try to find ways to improve nurses' job conditions. A lot of effort concentrates on organizing shift work in a more agreeable way by providing more autonomy to the nurses, e.g., through self scheduling. However, increased autonomy also means that nurses have to resolve scheduling conflicts within the team. To that end, a good team coherence is essential. In this brief exploratory study we present the pro-social practices of three Japanese nurses, each one working in a different setting that brings specific opportunities for pro-sociality. The findings can serve as a starting point for more focused, context-specific studies on pro-sociality in outpatient, residential, or day care.

Keywords: Helping, Shift Work, Prosocial Behavior, Healthcare, Communication

1 Introduction

Countries worldwide face a shortage of nurses, a trend that is particularly pronounced in ageing societies such as Germany or Japan (Aluttis et al., 2014; Dumont & Zurn, 2007). One reason for this shortage are the strenuous working conditions in many healthcare institutions, leading to low job satisfaction and high turnover rates (Lu et al., 2019).

A major problem with working conditions is that critical healthcare services in hospitals and geriatric care often require nurses to work in shifts. This in turn entails several issues for health and well-being, including disturbed sleep patterns, reduced performance, psychological and physiological health disorders, and impaired social life (Costa, 2010; Fenwick, 2001; Perrucci et al., 2007).

However, while shift work in itself is problematic, some of the problems can be reduced through good and inclusive organization of the shift schedules (Nelson & Tarpey, 2010; Rönnberg & Larsson, 2010). This scheduling process is therefore an important part of work organization and when it comes to distributing popular shifts, it is often a source of conflict within a team. Each nurses has to reconcile private and work-related responsibilities and compete with the colleagues for specific free times, for example around traditional holidays.

In order to organize the shift distribution in a more human-centered (rather than "efficiency-oriented") way, digital technologies can play an important role. For instance, an interactive scheduling system we presented in an earlier study (Uhde et al., 2020) could increase nurses' autonomy and subjective fairness of the scheduling process. A fundamental design

rationale of that system was to give as much autonomy in planning to nurses as possible when needed, and automate decisions they consider less important. In case of a planning conflict, the nurses could resolve it within the team. However, for the conflict resolution to work well, a positive team spirit is essential. Thus, we integrated, pro-social shift planning practices, such as leaving a free shift to co-workers who need it more urgently, as the foundation for our interaction design (Laschke et al., 2020; Schlicker et al., 2020).

The above framework focused specifically on pro-social practices during shift planning to foster a positive team spirit. However, while shift planning lays the foundation for a functioning schedule, it only amounts to a small part of the nurses' work. Most of the time they are busy with activities relating to their care work, e.g., taking care of their patients. Considering the facilitating role of a positive team spirit on conflict resolution, we were interested in further pro-social practices of nurses that are not directly related to shift planning, but which may have an indirect facilitating effect by supporting overall team coherence. While this was our primary motivation to conduct the study, a positive team spirit naturally has several other benefits e.g., on job satisfaction, well-being, and the functioning of the company (Bolino & Grant, 2016; Gebauer et al., 2008).

There are several different healthcare contexts with specific shift models, modes of collaboration among nurses, and spatial distribution of the work. For instance, outpatient care differs from residential care. In order to get a better understanding of opportunities for pro-social practices in different healthcare settings, we conducted an exploratory interview study with nurses from different contexts. In the following sections we will briefly outline the interview settings and preliminary results.

2 Qualitative Field Study

2.1 Participants

We recruited three Japanese nurses (31, 31, and 32 years old; all female) in the Tokyo metropolitan area in July 2019 through a gatekeeper who works as a nurse herself. The participants had between seven and ten years of work experience as a nurse. We searched for participants with diverse work settings to allow for a contrasting analysis (see Table 1). The interviews took place in public cafeterias on different days in July 2019 and the bills were paid for the participants as compensation.

2.2 Procedure

We followed a guide with questions about the work setting, communication with co-workers, and pro-social practices (1) by the nurses themselves and (2) by their co-workers. This was followed by more specific inquiries about their feelings, thoughts, and behavioral responses to each of the practices. Moreover, we allowed for deviations from the interview guide to further inquire interesting topics. The setting in a public place was chosen to allow for a relaxed atmosphere. During all interviews the gatekeeper was present and we engaged in around 30 minutes of off-topic conversation before starting, further asserting a secure and comfortable atmosphere. Interviews lasted for around 30 minutes and were held and transcribed in Japanese.

	P1	P2	P3
context	outpatient care	residential care	day care
work times	shift work	shift work	no shifts
work place	flexible	constant	constant
role	regular nurse	ward leader	daily changing leadership

Table 1. Work context of the three nurses.

2.3 Analysis

We analyzed the interview transcripts following the Interpretative Phenomenological Analysis (IPA) methodology (Smith et al., 2009). Two independent coders (authors 1 and 2) listened to and read the interviews separately, noting interesting formulations, content, and expressed feelings. In the next step, the two coders gathered their results and established consensus about the central, contrasting themes which we present in the following section.

3 Results

3.1 Work settings

Based on our recruitment, the three participants had very diverse work settings. P1 worked in outpatient care and her company had a shift model. However, she personally refused to work anything but early shifts: "Well, I told my company: 'I don't want to work too late'. […] And not too early either. […] If it starts at 7am or so, I don't do it. 8:30…8:00… At the moment, the earliest I have is 8:20." [P1, 22:46]. Based on prior experience at a former employer, she had a very strong opinion on shift work: "The ones who want to work [at night], they say: 'I want some more money' or so. After 6pm the hourly wage goes a bit up. […] So there are some people who say 'I want to work some more at night', and they never object… there are some people who work like slaves. Like, they work early and then with no break they work the night as well" [P1; 23:58].

P2 was a ward leader in a small residential care company. She worked all shifts (night, early, afternoon). In contrast to P1, P2 prioritized a harmonious atmosphere over regular work hours and she had switched employers as well. However, in her case the reason had been that she was unhappy with the interpersonal communication at the prior work place, rather than work times.

Finally, P3 worked in day care, so her work place had more regular work times for all employees. There were two slightly different day shifts (7:30 to 4:30 and 8:00 to 5:00) and all co-workers were present during the day.

3.2 Communication patterns

P1 communicated with her colleagues very indirectly and mainly through a common work account in a messenger app. While she worked for the same clients and in the same home as some of her co-workers, she had never met most of them in person. Her communication was largely mediated by a central office of her company and she often didn't know who was on the other end of the line. In case of an urgent problem, she contacted the call center who then contacted her co-worker. In extreme cases, e.g., when there were uncertainties about the clients' medication intake, she would call a colleague on the phone – but this rarely happened. Less urgent information could be left for the co-workers in a notebook in the clients' homes, such as a reminder to switch the heater on or off.

P2 described the communication within the team as most essential and as the ward leader she felt responsible to assert an open atmosphere. In her ward, communication happened mostly directly, face-to-face, among those who were present. Otherwise she would also call or be called on the phone outside working hours, or use a messenger. Besides the shared work environment, her group had monthly drinking parties ("Nomikai") or other shared private activities: "So…we go drinking in our free time, we drink alcohol and have fun together. And if we get along well with the clients, they also join and we drink alcohol together or so. And we eat together with their families. We're like one big family" [P2; 6:10]. She has a close relationship with the other people at her work place, talking about both work and private topics.

P3 separated her work and private life more clearly than P2. In her day care institution, every day one team member was assigned the "leader" role and organized a brief stand up meeting in the morning based on previous notes and documentation. During this meeting, the daily leader informed the team about the clients who

were to come and they discussed the tasks of the day. Afterwards, everyone started to work and if necessary, documented notable information in a notebook that informed a later morning briefing. Given the day care setting, communication mainly happened within the standard working hours (7:30 to 5:00).

3.3 Pro-social practices

The three settings allowed for very different types of pro-social practices. P1 had almost no direct contact to her colleagues, but she described several pro-social practices mediated by traces on artifacts in the clients' homes. In the notebook, she wrote in large, readable letters, knowing that some of her colleagues were already old and couldn't see well. She exchanged smileys and stamps to signal sympathy in the messenger. Moreover, if she had time left after finishing her responsibilities, she cleaned the homes or the company car: "Well, I don't want to work there [if it's so dirty], so I clean it. If I clean it, the others feel better when they enter" [P1, 13:20]. She complained about other co-workers leaving places dirty, however. Once she had accidentally met one of them at the company building who happened to work with a common client. The client in question owned a parrot and she recalled that this topic gave room for a fun conversation with her colleague. Finally, she noticed that some other co-workers who were friends in private sometimes left alcohol as a present for each other in the fridge of the clients when they knew that their friend would have a shift in the same place later on. Although this was against the rules, she thought that the clients' families didn't mind.

For P2, prosocial activities consisted of their open, interpersonal communication. The team talked about both private and work problems, either face-to-face or on the phone and within or outside their shifts: "If something bothers them […] they are so kind to tell me quite openly" [P2; 20:02]. Generally the team coherence was good and they helped each other at work. An exceptionally high level of care for the colleagues was in a way part of the "job requirements".

P3 described that "non-leader" nurses were very busy during the day and had few chances to go out of their way in order to help others. Moreover, jobs were not clearly distributed among them: "The responsibilities and so on are not assigned […] if I find something that should be done, I have to do it." [P3; 21:14]. This left little space to show personally motivated, pro-social effort. The daily leader had more freedom and made sure that everything was going well. When she saw that someone needed help while she was the leader, she helped out – but saw this more as her responsibility rather than a pro-social effort. Additional opportunities to help were difficult to find, but she mentioned some smaller favors. For example, in the evening she made sure that certain material (whiteboard, pens) was already in place to facilitate a smooth morning briefing the next day.

4 Discussion

While this small sample can merely serve as a starting point for further research, we found a few interesting research directions and context factors to be aware of.

First, the nurses had very different priorities for their jobs. P1 had previously experienced flexible working conditions where she felt exploited to an extent. In her new job she stood up for her own well-being by demanding regular work times. Incidentally, she also had very little personal contact to her co-workers. In contrast, P2's close relationship to co-workers as well as clients made it acceptable for her to work in possibly unhealthy amounts and shift patterns. In comparison of the two cases, one advantage of P1's minimal social contact could be that it made it easier for her to stand in for her own needs to a greater extent, because she has less concern for her colleagues. This fundamental conflict between self-concern and other-concern should be taken into account for further research (see also Grant, 2016).

Second, although P1 worked alone most of the time, she had several object-mediated ways to communicate with her colleagues. This asynchronous but co-located form of communication (Kirschner et al., 2002) opens up an interesting design space for pro-social practices in outpatient care. While her personal relation to the co-workers was very limited, she mentioned some activities (writing in a friendly and understandable way, cleaning) that clearly had some pro-social motivation. Moreover, her co-workers used the common space to exchange gifts. Indirect, object-mediated pro-social activities are therefore a promising research direction for outpatient care.

Third, P3 worked in a relatively stable environment, but work responsibilities were not clearly distributed within the team. Each team member was responsible for all tasks that they may find. While this may be an efficient form of work organization, it also renders pro-social "extra miles" in favor of co-workers impossible to be recognized as such. For future studies of pro-social activites at work, this variable needs to be taken into account.

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